

REMARKS

No claims have been cancelled or added. Claim 51 has been amended to correct a typographical error. Claims 1-2 and 10-60 are currently pending in the application. In view of the following remarks, Applicant respectfully requests withdrawal of the rejections and forwarding of the application onto issuance.

The § 103 Rejections

Claims 1, 2, 10-17, 23-34, 40, 41, 47-51, and 57-60 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,405,191 to Bhatt et al. (hereinafter referred to as “Bhatt”).

Claims 18-22, 35-39, 42-46, and 52-56 stand rejected under § 103(a) as being unpatentable over Bhatt, in view of a document entitled "*How to implement Web-based Groupware Systems based on WebDAV*" by Dridi and Neumann (hereinafter referred to as "Dridi").

Claims 1-2 and 5-13

Claim 1 recites a method of parsing an Extensible Markup Language (XML) data stream comprising [emphasis added]:

- defining a plurality of states, individual states being associated with individual elements of an XML data stream;
 - associating one or more rules with each state;
 - receiving an XML data stream;
 - evaluating the XML data stream against one or more of the rules for individual elements contained in the XML data stream; and
 - processing only those portions of the XML *data stream* that do not violate any of the rules that are associated with those portions.

In making out the rejection of this claim, the Office notes that Bhatt does not disclose a technique for processing only those portions of the XML data stream that do not violate any of the rules that are associated with those portions. Applicant agrees. The Office then argues that it would have been obvious to have modified Bhatt's subscription rules and used the fast evaluation as a mechanism to eliminate *rules* that need not be applied to specific messages [emphasis added]. The Office argues that such a technique would utilize a smaller set of stored subscription *rules* [emphasis added].

9 Applicant traverses this rejection. Applicant's claimed subject matter
10 recites a method that processes only those portions of the XML *data stream* that
11 do not violate any of the rules that are associated with those portions. Regardless
12 of whether or not it would have been obvious to eliminate one or more of Bhatt's
13 subscription *rules* (Applicant expresses no opinion as to such alleged
14 obviousness), Bhatt does *not* process only those portions of an XML *data stream*
15 that do not violate any of the rules that are associated with those portions. Rather,
16 Bhatt's subscription model must, *by necessity*, process the *entire* data stream to
17 ensure that all subscribers receive messages that satisfy their queries. As Bhatt
18 explains in column 3, lines 58-65 [emphasis added]:

19 A rules engine is used to apply the stored subscription rules to
20 *incoming messages* [i.e., the data stream]. If an incoming message
21 satisfies a subscription rule, then the message is published to the
22 particular subscriber that submitted the subscription rule. *Note that*
there may be multiple subscribers who have submitted subscription
rules that are satisfied by the incoming message. The message is
published to all such subscribers.

As shown in the excerpt above, the elimination of certain subscription rules would, in effect, eliminate certain subscribers from receiving the incoming

1 message. However, *all portions of the data stream* would need to be processed
2 against the remaining rules in order to publish the message to *all* subscribers who
3 submitted subscription rules which are satisfied by that message. As such, Bhatt
4 teaches *directly away* from Applicant's claimed subject matter. In fact, if one
5 were to modify Bhatt such that it processes only certain portions of the data
6 stream, it would appear that Bhatt's system might be rendered *inoperable*.

7 Accordingly, for at least these reasons, the Office has failed to establish a
8 *prima facie* case of obviousness, and this claim is allowable.

9 **Claims 2 and 10-13** depend either directly or indirectly from claim 1 and
10 are allowable as depending from an allowable base claim. These claims are also
11 allowable for their own recited features which, in combination with those recited
12 in claim 1, are neither disclosed nor suggested by the cited references, either
13 singly or in combination with one another.

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15 **Claims 14-23**

16 **Claim 14** recites a method of parsing an Extensible Markup Language
17 (XML) data stream comprising [emphasis added]:

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- defining a *schema module* that is associated with an *HTTP request* type that is received from a client, the schema module having a function that determines whether an XML data stream conforms to a given schema that is associated with the HTTP request type;
 - evaluating an XML data stream with the *schema module*; and
 - processing only those portions of the XML data stream that conform to the given *schema*.

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In making out the rejection of this claim, the Office again notes that Bhatt does not disclose a technique for processing only those portions of the XML data stream *that do not violate any of the rules that are associated with those*

portions. Applicant agrees but respectfully points out that this claim recites a method which *processes only those portions* of the XML data stream *that conform to the given schema*. The Office then argues that it would have been obvious to have modified Bhatt's subscription rules and used the fast evaluation as a mechanism to eliminate *rules* that need not be applied to specific messages [emphasis added].

As an initial matter, Applicant will respond to the Office's argument by respectfully submitting that *all portions of Bhatt's data stream* would need to be processed against the remaining rules in order to publish the message to *all* subscribers who submitted subscription rules which are satisfied by that message. In fact, if one were to modify Bhatt such that it processes only certain portions of the data stream, it would appear that Bhatt's system might be rendered *inoperable*.

More importantly, it appears that the Office has simply restated the rejection from claim 1 and used it for claim 14, although the language of claim 14 is quite different from the language of claim 1. Although the Office rejects this claim under § 103 as being unpatentable over Bhatt, nowhere does the Office demonstrate that Bhatt discloses or suggests defining a *schema module* that is associated with an *HTTP request type* that is received from a client. Applicant has reviewed Bhatt and can find no teaching or suggestion of a schema module as recited in this claim.

Consequently, Applicant respectfully submits that the Office has failed to establish a *prima facie* case of obviousness with respect to this claim. According to MPEP § 2143.03 [emphasis added]:

To establish *prima facie* obviousness of a claimed invention, *all* the claim limitations must be taught or suggested by the prior art. *In re Royka*, 490 F.2d 981, 180 USPQ 580 (CCPA 1974). "All words in a

1 claim must be considered in judging the patentability of that claim
2 against the prior art." *In re Wilson*, 424 F.2d 1382, 1385, 165 USPQ
3 494, 496 (CCPA 1970).

4 Applicant has thoroughly reviewed the Bhatt reference and respectfully
5 submits that Bhatt neither discloses nor suggests a *schema module* that is
6 associated with an *HTTP request type* that is received from a client, as Applicant
7 has defined and used the term "schema module." Because Bhatt does not disclose
8 nor suggest *defining* a schema module, Bhatt cannot possibly *evaluate* an XML
9 data stream with a *schema module*. Hence, because the references do not disclose
10 *all* of the features of this claim, the Office has failed to establish a *prima facie* case
11 of obviousness.

12 Accordingly, for at least these reasons, this claim is allowable.

13 Claims 15-23 depend either directly or indirectly from claim 14 and are
14 allowable as depending from an allowable base claim. These claims are also
15 allowable for their own recited features which, in combination with those recited
16 in claim 14, are neither disclosed nor suggested by the cited references, either
17 singly or in combination with one another. In addition, as these claims are
18 allowable, Dridi is not seen to add anything of significance to the rejection of
19 claims 18-22.

20 **Claims 24-29**

21 Claim 24 recites an Extensible Markup Language (XML) parsing system
22 comprising [emphasis added]:

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- 24 • a parser configured to receive an XML data stream and generate a series of calls as it parses the XML data stream;
 - 25 • a *node factory* communicatively associated with the parser and configured to *receive the parser's calls* and responsive thereto

1 construct a representation of the XML data stream that the parser is
2 parsing; and

- 3 • a schema module communicatively associated with the node factory
4 and configured to evaluate the node factory's representation of the
5 XML data stream and determine whether it conforms to a known
6 schema.

7 Applicant is somewhat confused regarding the rejection of this claim but
8 will reproduce the Office's rejection in its entirety and attempt to follow the
9 Office's logic. In making out the rejection of this claim, the Office argues the
10 following [emphasis added]:

11 When a subscriber submits a subscription rule, the database parser
12 by first normalizing the subscription
13 rule into a series of expressions joined by disjunctive operators. A
14 complex condition can be, for example, a combination of user
15 defined functions, a condition that requires accessing *other tables in*
16 *the database* beyond the message table itself. See column 6, lines 1-
17 20. The *accessing of other tables* provides a reasonable suggestion
18 of receiving XML data types and the generation of a *series of calls*
19 as it parses the incoming message.

20 As an initial matter, Applicant is confused as to whether the Office equates
21 Bhatt's *subscription rules* with Applicant's XML data stream or whether the
22 Office equates Bhatt's *message* (to be published to subscribers based on its
23 adherence to various subscription rules) with Applicant's XML data stream.
24 Applicant will presume, based on the rest of the rejection, that the Office equates
25 Bhatt's subscription rules with Applicant's XML data stream for this claim.

26 The Office continues [emphasis added]:

27 The *Array of Rules* are associated with the normalization of the
28 subscription rules and based upon the parsing techniques of the
29 incoming messages.

30 The reference does not explicitly state a node factory; however, the
31 *Array of Rules* organized in an index and based on the value of the

subscription rule provide an association of elements and a *representation of rules* based on those elements. The organization and representation of these rules in an index provides a similar job of evaluating an incoming message. It would have been obvious to one of ordinary skill in the art at the time the invention was made to have utilized the array of subscription rules associated with each attribute to provide a similar function of associating the schema configured to evaluate the normalization of the subscription rule for efficient fast evaluation of an incoming message.

Applicant is confused as to what exactly the Office equates with Applicant's node factory. Applicant's claim recites that the node factory is communicatively associated with the parser and configured to *receive the parser's calls*. The Office apparently considers Bhatt's accessing of other tables in the database beyond the message table to be analogous to the series of calls that Applicant's parser generates. However, Applicant cannot determine what entity the Office argues is *receiving* the parser's calls.

Applicant's node factory is recited to, *responsive to the parser's calls*, *construct a representation of the XML data stream* that the parser is parsing. The Office seems to argue that Bhatt's array of rules is the *representation* of an XML data stream that its "database parser" is parsing. This claim recites that Applicant's *node factory* constructs the representation. It appears that Bhatt's "database parser" constructs the Array of Rules. However, according to the Office's logic, it is Bhatt's "database parser" that generates a series of calls as it parses the rules. This presents an inconsistency in the Office's argument because this claim recites both a parser which *generates a series of calls* and a node factory that is configured to *receive the parser's calls* and to *construct a representation* of the XML data stream that the parser is parsing responsive to the parser's calls. Applicant respectfully submits that Bhatt neither teaches nor suggests this subject matter.

1 Accordingly, the Office has failed to establish a *prima facie* case of
2 obviousness, and this claim is allowable. Applicant respectfully requests that the
3 Office either withdraw the rejection of this claim or *specifically* point out where
4 Bhatt teaches or suggests *each element* of this claim.

5 Claims 25-29 depend either directly or indirectly from claim 24 and are
6 allowable as depending from an allowable base claim. These claims are also
7 allowable for their own recited features which, in combination with those recited
8 in claim 24, are neither disclosed nor suggested by the cited references, either
9 singly or in combination with one another.

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11 **Claims 30-33**

12 Claim 30 recites an Extensible Markup Language (XML) parsing system.
13 The recited system comprises [emphasis added]:

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15 • a *collection of schema modules*, each of which being configured to
16 evaluate a different schema that is associated with an XML data
17 stream; and
18 • a *plurality of states* associated with each schema module, individual
19 states of a schema module defining a schema requirement relating to
20 a particular element that is evaluated by that schema module.

21 In making out this rejection of this claim, the Office appears to have simply
22 restated the arguments used in rejecting claim 24 and used them in rejecting this
23 claim, despite the fact that the language of this claim is quite different from the
24 language of claim 24. For example, the Office argues that the accessing of Bhatt's
25 other tables provides a reasonable suggestion of *receiving XML data types and*
the generation of a series of calls as it parses the incoming message. However,
such language does not appear in this claim. Similarly, the Office states that the

reference does not explicitly state a *node factory*. A node factory is not recited as part of this claim.

Consequently, Applicant respectfully submits that the Office has failed to fully examine this claim. Accordingly to MPEP § 2143.03 [emphasis added]:

To establish *prima facie* obviousness of a claimed invention, *all* the claim limitations must be taught or suggested by the prior art. *In re Royka*, 490 F.2d 981, 180 USPQ 580 (CCPA 1974). “*All words* in a claim must be considered in judging the patentability of that claim against the prior art.” *In re Wilson*, 424 F.2d 1382, 1385, 165 USPQ 494, 496 (CCPA 1970).

Applicant has thoroughly reviewed the Bhatt reference and respectfully submits that Bhatt neither discloses nor suggests the subject matter of this claim. Because the references do not disclose *all* features of this claim, the Office has failed to establish a *prima facie* case of obviousness.

Accordingly, for at least these reasons, this claim is allowable.

Claims 31-33 depend either directly or indirectly from claim 30 and are allowable as depending from an allowable base claim. These claims are also allowable for their own recited features which, in combination with those recited in claim 30, are neither disclosed nor suggested by the cited references, either singly or in combination with one another.

Claims 34-39

Claim 34 recites a method of parsing an Extensible Markup Language (XML) data stream comprising [emphasis added]:

- defining a plurality of states, individual states being associated with individual elements of an XML data stream;
- associating one or more rules with each state;

- 1 • receiving an XML data stream;
- 2 • evaluating the XML data stream against one or more of the rules for
individual elements contained in the XML data stream; and
- 3 • *disregarding associated portions* of the XML data stream if any of
the rules that are associated with those portions are violated, the
disregarded portions of the XML data stream representing at least
one *error in the XML data stream*.

5 In making out the rejection of this claim, the Office notes that Bhatt does
6 not disclose a technique for processing only those portions of the XML data
7 stream that do not violate any of the rules that are associated with those portions.
8 Applicant agrees but notes that this claim recites *disregarding associated portions*
9 of the XML data stream if any of the rules that are associated with those portions
10 are violated. This claim also recites that the disregarded portions of the XML data
11 stream represent at least one *error in the XML data stream*. In addition to citing
12 the wrong claim language, *nowhere* in the rejection of this claim does the Office
13 argue that Bhatt discloses or suggests disregarding portions of an XML data
14 stream which represent at least one *error in the XML data stream*.

15 Consequently, Applicant respectfully submits that the Office has failed to
16 fully examine this claim. Accordingly to MPEP § 2143.03 [emphasis added]:

18 To establish *prima facie* obviousness of a claimed invention, *all* the
19 claim limitations must be taught or suggested by the prior art. *In re Royka*, 490 F.2d 981, 180 USPQ 580 (CCPA 1974). “*All words* in a
20 claim must be considered in judging the patentability of that claim
against the prior art.” *In re Wilson*, 424 F.2d 1382, 1385, 165 USPQ
21 494, 496 (CCPA 1970).

22 Applicant has thoroughly reviewed the Bhatt reference and respectfully
23 submits that Bhatt neither discloses nor suggests the subject matter of this claim.
24 Because the references do not disclose or suggest *all* of features of this claim, the
25 Office has failed to establish a *prima facie* case of obviousness.

1 Accordingly, for at least these reasons, this claim is allowable.

2 Claims 35-39 depend either directly or indirectly from claim 34 and are
3 allowable as depending from an allowable base claim. These claims are also
4 allowable for their own recited features which, in combination with those recited
5 in claim 34, are neither disclosed nor suggested by the cited references, either
6 singly or in combination with one another. In addition, as these claims are
7 allowable, Dridi is not seen to add anything of significance to the rejection of
8 claims 35-39.

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10 **Claims 40-50**

11 **Claim 40** recites a method of parsing an Extensible Markup Language
12 (XML) data stream comprising [emphasis added]:

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- defining a plurality of states, individual states being associated with individual elements of an XML data stream, wherein the defining of the plurality of states comprises *defining one or more schema modules* that are configured to track one or more states of the XML data stream;
 - associating one or more rules with each state;
 - receiving the XML data stream;
 - evaluating the XML data stream against one or more of the rules for individual elements contained in the XML data stream, wherein the evaluating comprises *using the one or more schema modules* to evaluate the XML data stream against one or more schema-based rules; and
 - *disregarding associated portions* of the XML data stream if any of the rules that are associated with those portions are violated.

22 In making out the rejection of this claim, the Office notes that Bhatt does
23 not disclose a technique for processing only those portions of the XML data
24 stream that do not violate any of the rules that are associated with those portions.
25 Applicant agrees but notes that this claim recites *disregarding associated portions*

of the XML data stream if any of the rules that are associated with those portions are violated. In addition to citing the wrong claim language, *nowhere* in the rejection of this claim does the Office argue that Bhatt discloses or suggests **defining one or more schema modules** that are configured to track one or more states of the XML data stream. Nor does the Office argue, *anywhere* in the rejection of this claim, that Bhatt discloses or suggests **using the one or more schema modules** to evaluate the XML data stream against one or more schema-based rules.

Consequently, Applicant respectfully submits that the Office has failed to fully examine this claim. Accordingly to MPEP § 2143.03 [emphasis added]:

To establish *prima facie* obviousness of a claimed invention, *all* the claim limitations must be taught or suggested by the prior art. *In re Royka*, 490 F.2d 981, 180 USPQ 580 (CCPA 1974). “*All words* in a claim must be considered in judging the patentability of that claim against the prior art.” *In re Wilson*, 424 F.2d 1382, 1385, 165 USPQ 494, 496 (CCPA 1970).

Applicant has thoroughly reviewed the Bhatt reference and respectfully submits that Bhatt neither discloses nor suggests the subject matter of this claim. Because the references do not disclose *all* features of this claim, the Office has failed to establish a *prima facie* case of obviousness.

Accordingly, for at least these reasons, this claim is allowable.

Claims 41-50 depend either directly or indirectly from claim 40 and are allowable as depending from an allowable base claim. These claims are also allowable for their own recited features which, in combination with those recited in claim 40, are neither disclosed nor suggested by the cited references, either singly or in combination with one another. In addition, as these claims are

allowable, Dridi is not seen to add anything of significance to the rejection of claims 42-46.

Claims 51-60

Claim 51 recites a method of parsing an Extensible Markup Language (XML) data stream comprising [emphasis added]:

- defining a plurality of states, individual states being associated with individual elements of an XML data stream, wherein the defining of the plurality of states comprises *defining one or more schema modules* that are configured to track one or more states of the XML data stream, each schema module being associated with at least one *request type* that defines the XML data stream;
- associating one or more rules with each state;
- receiving the XML data stream;
- evaluating the XML data stream against one or more of the rules for individual elements contained in the XML data stream; and
- *disregarding associated portions* of the XML data stream if any of the rules that are associated with those portions are violated.

In making out the rejection of this claim, the Office notes that Bhatt does not disclose a technique for processing only those portions of the XML data stream that do not violate any of the rules that are associated with those portions. Applicant agrees but notes that this claim recites *disregarding associated portions* of the XML data stream if any of the rules that are associated with those portions are violated. In addition to citing the wrong claim language, *nowhere* in the rejection of this claim does the Office argue that Bhatt discloses or suggests *defining one or more schema modules* that are configured to track one or more states of the XML data stream. Nor does the Office argue, *anywhere* in the rejection of this claim, that Bhatt discloses or suggests each schema module being associated with at least one *request type* that defines the XML data stream.

1 Consequently, Applicant respectfully submits that the Office has failed to
2 fully examine this claim. Accordingly to MPEP § 2143.03 [emphasis added]:

3 To establish *prima facie* obviousness of a claimed invention, *all* the
4 claim limitations must be taught or suggested by the prior art. *In re*
5 *Royka*, 490 F.2d 981, 180 USPQ 580 (CCPA 1974). “*All words* in a
6 claim must be considered in judging the patentability of that claim
against the prior art.” *In re Wilson*, 424 F.2d 1382, 1385, 165 USPQ
494, 496 (CCPA 1970).

7 Applicant has thoroughly reviewed the Bhatt reference and respectfully
8 submits that Bhatt neither discloses nor suggests the subject matter of this claim.
9 Because the references do not disclose *all* features of this claim, the Office has
10 failed to establish a *prima facie* case of obviousness.

11 Accordingly, for at least these reasons, this claim is allowable.

12 Claims 52-60 depend either directly or indirectly from claim 51 and are
13 allowable as depending from an allowable base claim. These claims are also
14 allowable for their own recited features which, in combination with those recited
15 in claim 51, are neither disclosed nor suggested by the cited references, either
16 singly or in combination with one another. In addition, as these claims are
17 allowable, Dridi is not seen to add anything of significance to the rejection of
18 claims 52-56.

1 **Conclusion**

2 All of the claims are in condition for allowance. Accordingly, Applicant
3 requests that a Notice of Allowability be issued forthwith. If the Office's next
4 anticipated action is to be anything other than issuance of a Notice of Allowability,
5 Applicant requests that the undersigned be contacted for the purpose of scheduling
6 an interview.

7 Respectfully submitted,

8 Dated: 8/23/04

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